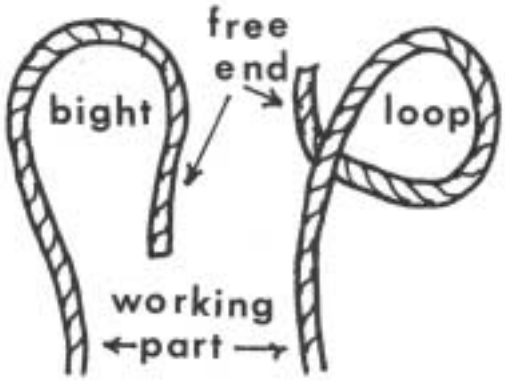
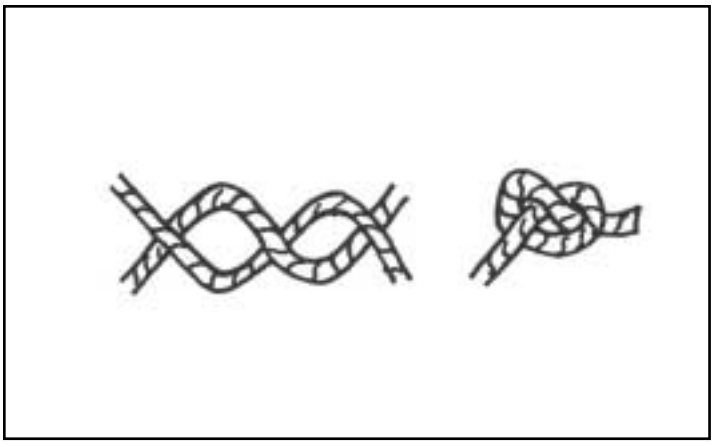
Tying Farm Knots

A rope is one of the most common of tools used to restrain animals. Unfortunately, most people never learn which knots are most efficient to use in given situations. Practice tying the knots presented here as you read through the descriptions.

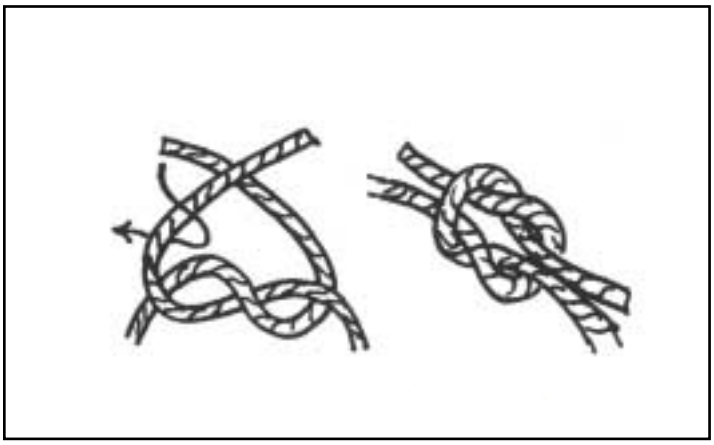
First, let's define the parts of the rope:





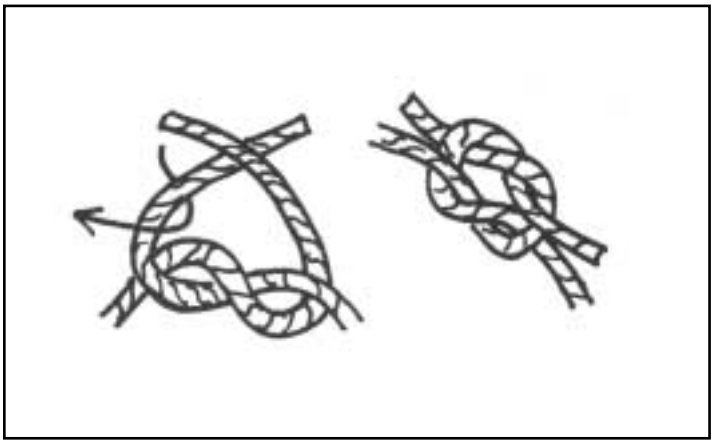
Overhand Knot

An overhand knot is the simplest of all knots. Generally, it is not used by itself but is the first step in tying more complex knots. It may be used by itself to keep the end of the rope from unraveling or to provide a knob or hand hold in a rope.



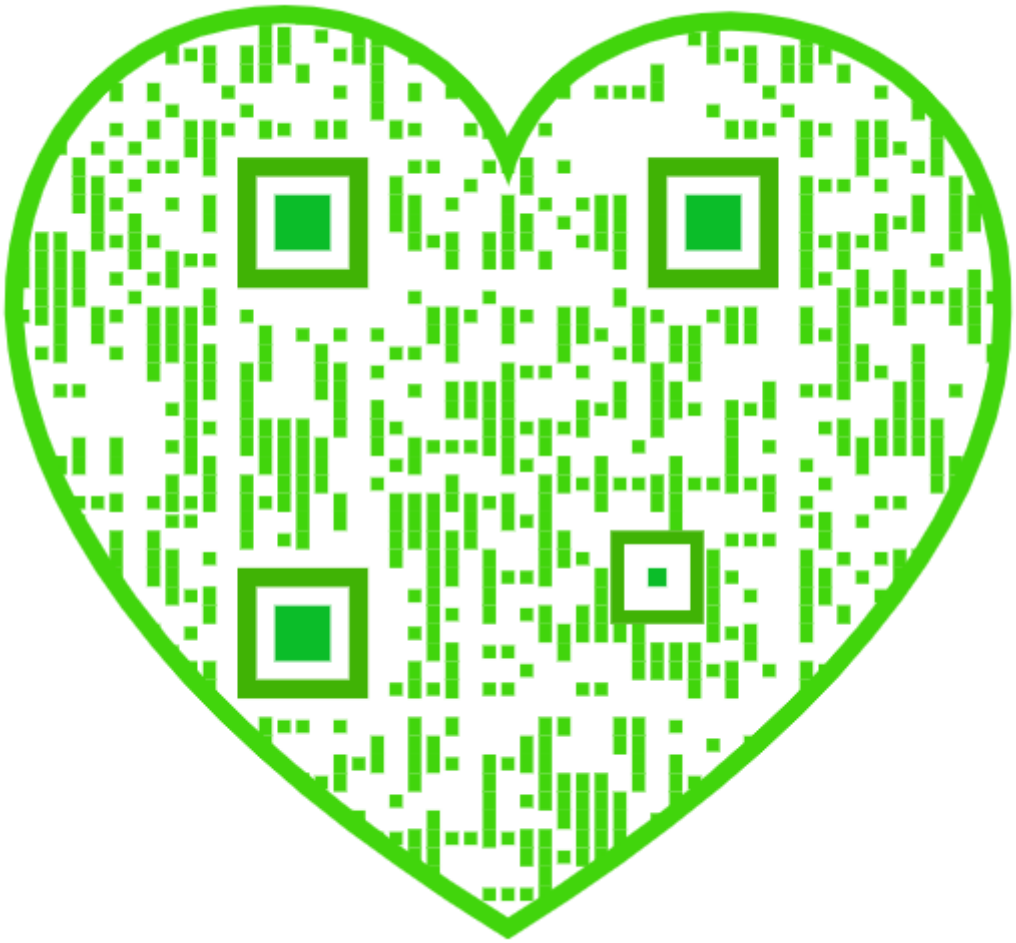
Square Knot

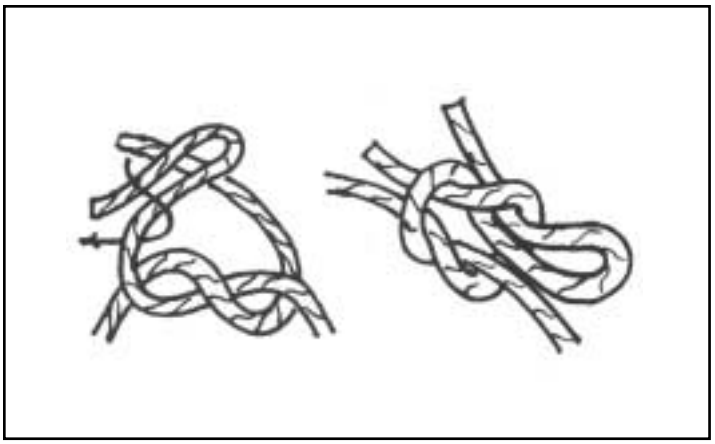
The square knot is simply two overhand knots tied one after the other. The sequence must be correct. Remember: right over left then left over right as you tie the overhand knots. Or the opposite: left over right then right over left. The knot should have a "square" appearance. The square knot is a strong, small knot used to tie the ends of two ropes together. When splicing two balls of twine together in a baler, a square knot is used. Under tension, a square knot will tighten and may be difficult to untie.



Granny Knot

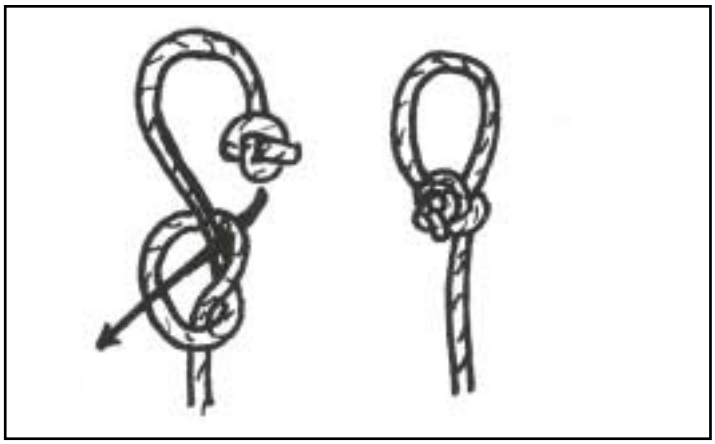
The granny knot is an undesirable knot that is illustrated here so that you recognize it. It has no useful purpose. People mistakenly tie it when what they really want is a square knot. It is two overhand knots like the square knot but is bigger and not as strong. It is tied by going left or right and then left over right again, or by beginning right over left and going right over left with the second overhand knot.





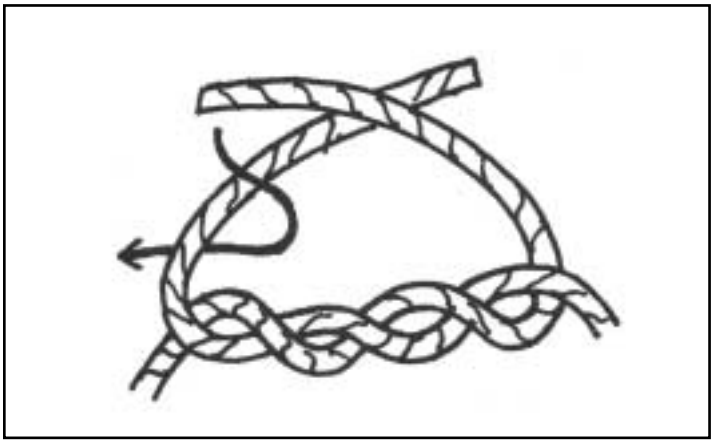
Reefer's Knot

The reefer's knot is just a square knot with a single bow in it so that it can be untied. A common use might be to tie a gate open or closed. Another closely related knot is the bow knot which is used to tie shoe laces.



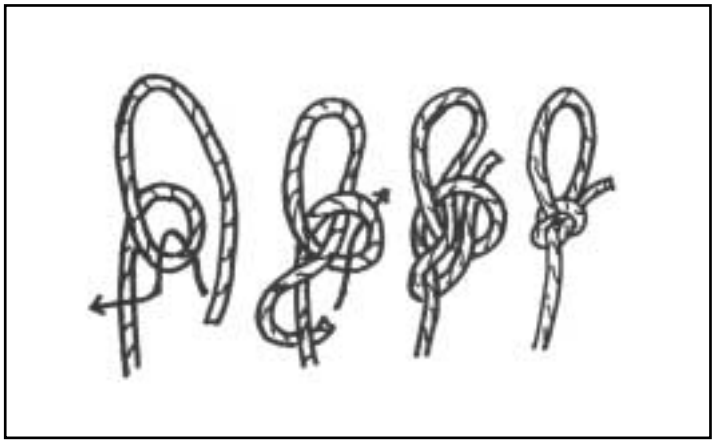
Honda Knot

The honda knot is simply one overhand knot inserted into another. Like the bowline knot, it will give a nonslip loop. It is used to form the small loop for the end of a lariat to pass through and because of its nonslip property may be used to tie a rope around an animal's neck.



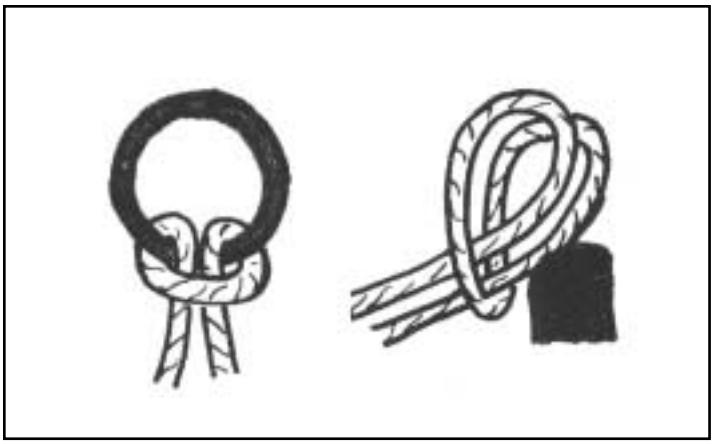
Surgeon's Knot

Another variation of the square knot is the surgeon's knot. This knot has the advantage of the first overhand knot holding while the second is being tied. When putting in the first overhand knot, wrap 2 or 3 times instead of once. This provides additional friction between the rope, making it easier to hold. The surgeon's knot is used when the rope is under tension as you are trying to tie it. It is used when retying a bale, tying an overstuffed package or during suturing.



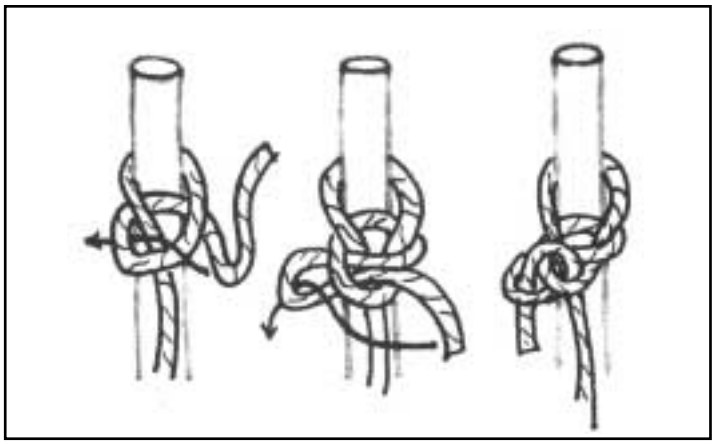
Bowline Knot

The bowline knot is the preferred knot when tying a rope around any part of an animal's body because it won't slip and tighten around the animal. Also, the knot is relatively easy to untie. First, place a loop in the rope where the knot is to be tied. The loop should be pointed toward the free end and the working part should be to the back. Next, insert the free end of the rope through the loop from the back. Go around the working part of the rope and back through the loop and tighten. To help you remember, there is a story that goes along with the knot: "The rabbit jumps out of the hole, runs around the front and down behind the tree and jumps back in the hole." With a little practice, it is a knot that can be tied quickly.



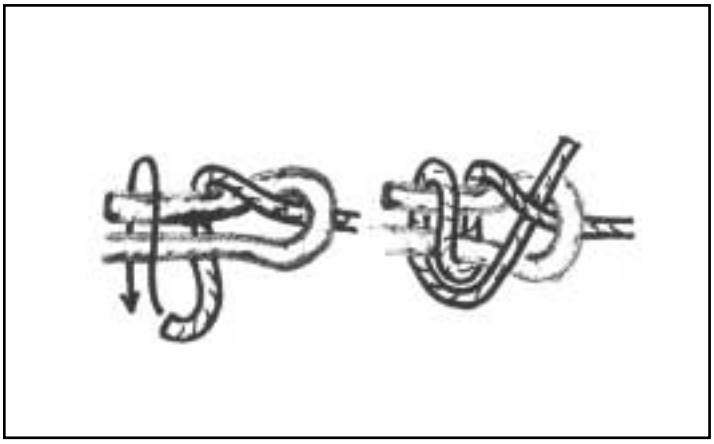
Ring Knot

The ring knot is used to fasten a ring to a rope or can be quickly formed and dropped over or tied to a post. For a drop over ring knot, make a bight in the rope, grasp the two strands with one hand and pull the bight over your hand. The resulting double loop can be dropped over a post.



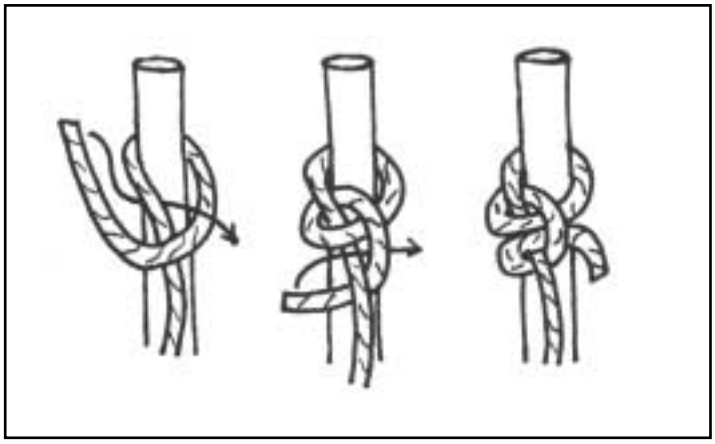
Quick Release Knot

The quick release knot is frequently used when tying a haltered animal to a post or fence. It can be released very quickly should the need arise, although it may tighten up to the point where the bow is hard to pull out. To prevent the animal from releasing itself, insert the free end through the bow after the knot is tied.



Double Sheet Bend Knot

The double sheet bend knot is used to tie two ropes of unequal size or stiffness together. If the ropes are similar, the simpler square knot should be used. To tie, form a bight in the larger or stiffer of the two ropes, then run the lighter rope into the bight, wrap it around the heavier rope and then string it between itself and the strands of the bight as illustrated.



Double Half Hitch

The double half hitch is the preferred knot if a haltered animal's head needs to be snugged up tight to a post such as for dehorning or other operations. The double half hitch cannot be released as quickly as a quick release knot, but is easier to tie while keeping the rope tight and is a more secure knot. It doesn't tighten up on itself so is easy to untie.

Making a Rope Halter

Rope halters are needed occasionally on all dairy farms. They are inexpensive to buy, but even so, it is worthwhile to know how they are made because it may be inconvenient to run to the farm supply store when one is needed. In addition, if you know how they are made, it will be easier to repair or adjust one if the need arises.

To make a halter, start with a three strand rope 12' to 15' in length. A 3/8-inch rope is suitable for calves. Halters for yearlings or cows are made from 7/16 or 1/2 inch rope.

Finishing the Rope Ends

The first step is to finish the ends of the rope to prevent them from unraveling. Only one end needs to be finished if alternative 2 is used to finish the nose piece of the halter. Following are several methods used to finish the end of a rope:

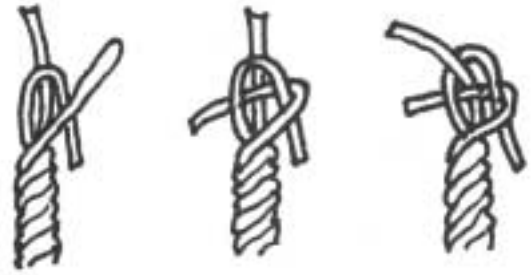
1. The quickest, but not the best, way to finish a rope is to put an overhand knot in the end of the rope. The figure-eight knot as illustrated is actually a more secure knot.

2. Dipping 1-2" of the rope into an oil based paint or varnish works well except for polypropylene rope. It should dry for 24 hours before it is used.

3. The ends of nylon, dacron and polypropylene rope can be heated to fuse the fibers together. If using a flame, hold the end of the rope from the flame so that the rope heats thoroughly instead of only the outer fibers. The fibers should melt and stick together. Wear an old pair of heavy leather gloves so that you can shape the hot end in case a large knob or sharp edge results.

4. Metal wraps, hog rings, or heavy wire or wire staples bent around the rope will prevent it from unraveling if done properly. Be certain that there are no sharp edges when you are finished.

5. You can "crown" the rope by using a crown knot and back splicing. Start by unraveling about four inches of the rope.



Hold the rope in one hand to prevent it from unraveling further. Take the upper most strand and bend it between the other two, forming a bight. Wrap the next strand down around the bight. Insert the last strand into the bight. Carefully pull on each of the strands to tighten the crown knot. It should be a very symmetrical knot.

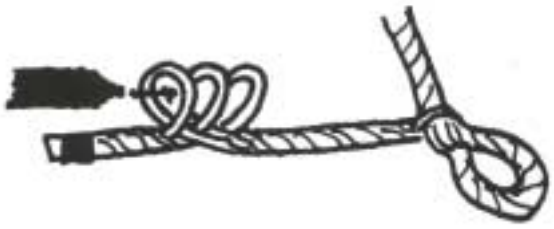
Back splicing is now done to complete the crowning of the rope. Hold the knot in one hand and twist the rope to loosen the strands. Start with any strand and bend it over the strand next to it and under the next strand, which should be itself. Do the same with the other two strands. Bending them over one strand down the rope and under themselves. Continue lacing the strands over one and under one down the rope so that each strand is tucked under 3 times. Trim the frayed ends.

Making the Halter

1. Measure out 12” from the end of the rope for the nose piece for a calf-sized halter. Twist the rope to open up the strands. Insert the short rope under one strand, leaving a loop twice the diameter of the rope.

2. To secure this loop, open up the strands of the nose piece near the loop. Push the long end of the rope under the two opened strands and pull it through until it is tight.

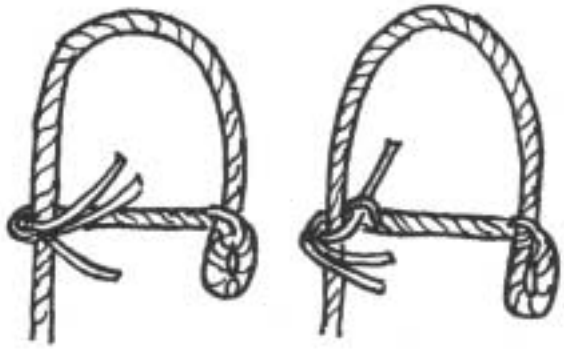
Finishing the Nose Piece (Alternative 1)



3. Grasp the nose piece near the end with one hand and 2-3 inches further down the rope with the other. Twist the rope between your hands to open the strands, then push your hands together. The strands should buckle and fold over, forming three loops. Line up the loops and put a stick the diameter of the rope through them to keep them in place.

4. Put the long end of the rope through the loops one at a time, starting with the loop furthest from the short end. Remove the stick as you go. After that is complete, run the long end of the rope through the eye loop to complete your halter.

Finishing the Nose Piece (Alternative 2)



3. With this method, the short end of the rope should not be finished. Bend about five inches over the head piece as shown. Unravel the end of the rope. Back splice the strands into the nose piece as previously illustrated on page 55. First take the center strand and insert it under the first strand of the nose piece. Repeat with the second strand. Keep the loop tight around the rope of the head piece.

4. Work around the rope, lacing the strands over one and under one so that each strand is tucked at least three times. Trim the frayed ends. After the splice is complete, run the long end of the rope through the eye loop to complete the halter.

When putting the halter on an animal, the lead rope should be on the left hand side of the animal's head *(Figure 1)*. The part of the halter that tightens through the loop should be under the animal's chin. The length of the nose piece will determine how high it rides on an animal's face. A short nose piece will cause the halter to ride lower on the nose and will give you more control when leading the animal. Finished nose pieces should be about 7" long for calves and up to 14" long for cows.

Figure 1